

**WHAT IS CLAIMED IS:**

Sub  
2 Al

1. A method comprising:  
2 setting an indicator in a buffer;  
3 reading pixel data for a current video line from the  
4 buffer;  
5 determining when the pixel data reaches the indicator;  
6 and  
7 loading data for the next video line into the buffer.

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*Claim 12*

7. The method of Claim 1, further comprising  
2 positioning the pixel data on an active display to create a  
3 video overlay.

*Sub A2*

8. A method of processing video overlay data  
2 comprising:

3 reading video data for a current video line from a  
4 buffer;

5 detecting the position in the buffer the video data is  
6 located;

7 loading data for the next video line into the buffer when  
8 the video data for the current video line is located at a  
9 predetermined position.

*Sub C4*

9. The method of Claim 12, further comprising setting  
10 the predetermined position at a position before all the  
11 current video line data is read.

*Sub A3*

10. The method of Claim 8, further comprising setting  
11 the predetermined position at approximately a midpoint of the  
12 buffer.

11. The method of Claim 8, further comprising loading  
12 data for the next video line to replace data for the current  
13 video line in the buffer.

12. The method of Claim 8, further comprising processing  
the current video line data for display.

1 13. The method of Claim 12, further comprising  
2 displaying the processed video line data.

1 Sub  
2 A4 14. ~~A overlay display processor comprising:~~  
3 a buffer having a plurality of memory locations, the  
buffer adapted to provide data to a display; and  
4 an indicator positioned at a predetermined memory  
location in the buffer, wherein the buffer begins to read data  
5 for a next video data line when the buffer provides data from  
6 the indicator memory location.

1 15. The computer of Claim 14, further comprising graphic  
2 memory which provides the video pixel data to the buffer.

1 16. The computer of Claim 14, wherein the buffer  
2 provides data to the display for a current video line.

1 17. The computer of Claim 14, wherein the indicator is  
2 located at a position at approximately a midpoint of the  
3 buffer.

1 18. A overlay display system comprising:

2 ~~video memory which stores video data;~~

an overlay processing engine comprising:

4                   a buffer which receives the video data from the  
5                   memory

6 video processing circuitry for preparing the video  
7 data in the buffer to be displayed; and

8           a display which receives the processed data from the  
9         overlay processing engine, wherein the buffer begins to read  
10        data for a next video data line when the buffer provides a  
11        predetermined amount of data to the display for a current  
12        video data line.

19. The computer of Claim 18, wherein the predetermined amount of data is approximately half the data comprising the current video data line.

20. The computer of Claim 18, wherein the overlay processing engine provides data to the display to create a video overlay.

1           21. The computer of Claim 18, wherein the video  
2 processing circuitry includes pixel color conversion and  
3 , adjustment.

1 22. A program storage device readable by a machine  
2 comprising instructions that cause the machine to:

3           set an indicator in a buffer;

4           read pixel data for a current video line from the buffer;

5           determine when the pixel data reaches the indicator; and

6           load data for the next video line into the buffer.

1           23. The program storage device of Claim 22, wherein the  
2           instructions further cause the machine to set the indicator at  
3           approximately a middle of the buffer.